

## CLAIMS

1/ A transition between a rectangular waveguide and a  
5 microstrip line, characterized in that it consists of a ribbed rectangular  
waveguide (G) realised in a bar (20) in synthetic material of which the  
metallized base (8) under the rib (6) continues in the form of a plate in  
synthetic material constituting a substrate for the microstrip line, the rib  
having a base extending between the upper plane (4) of the ribbed  
10 waveguide and the upper plane (5) of the substrate and the microstrip line  
(7) being disposed on the upper plane of the substrate in the continuation  
of the base of the rib.

2/ The transition according to claim 1, in which the base of the  
15 rib (6) has a linear profile.

3/ The transition according to claim 1 or 2, in which the foam  
plate constituting the substrate has a thickness that varies according to a  
longitudinal direction (A) to modify the width of the microstrip line (7) by  
20 maintaining a quasi-constant characteristic impedance.

4/ The transition according to one of claims 1 to 3, in which the  
synthetic material is a dielectric foam, for example a polymethacrylate  
imide foam.

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